
Select a loop

For a Meridian digital telephone, the loop must be without bridge taps, less than 175 ohm DC resistance, and less than 12.0 dB loss at 256 kHz. For single-gauge 22 and 24 AWG cable, and D inside wiring, the length limit is 914.4 m (3000 ft). For single-gauge 26 AWG cable, the length limit is 640.08 m (2100 ft).

The allowable loop length assumes there is no under-carpet cable. If there is under-carpet cable that is a different type than Western Electric (WE) 4-pair cable, reduce the allowable loop length by using the following equation:

$$LM = [12 - (UC \times UL)] / LL$$

where:

LM = loop length limit in km (kft) (excluding the length of the under-carpet cable)

LL = loop loss in dB/km (dB/kft) at 256 kHz

UC = length of the under-carpet cable in km (kft)

UL = loss of the under-carpet cable in dB/km (dB/kft) at 256 kHz (see Table 3 for dB values)